

What is claimed is:

1. An optical interference display unit at least comprising:

a first electrode;

a second electrode, in parallel with the first electrode and comprising:

5 a first material layer; and

a second material layer; and

a support structure supporting a edge of the second electrode;

wherein at least one material for forming the first material layer and the second material layer is a conductive material.

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2. The optical interference display unit of claim 1, wherein the optical interference display unit is located on a substrate.

3. The optical interference display unit of claim 2, wherein the substrate  
15 is a transparent substrate.

4. The optical interference display unit of claim 1, wherein a material of the first electrode is a conductive transparent material.

20 5. The optical interference display unit of claim 4, wherein the conductive transparent material is indium tin oxide (ITO), indium zinc oxide (IZO), or indium oxide (IO)

6. The optical interference display unit of claim 1, wherein the second  
25 electrode is a deformable electrode.

7. The optical interference display unit of claim 1, wherein the second electrode is a movable electrode.

8. The optical interference display unit of claim 1, wherein a material for forming the support structure is selected from a group consisting of positive photoresist, negative photoresist, acrylic resin and epoxy resin.

5        9. The optical interference display unit of claim 1, wherein the first material layer is made from a conductive material and the second material layer is made from metal or dielectric material.

10       10. The optical interference display unit of claim 1, wherein the first material layer is made from metal or dielectric material and the second material layer is made from a conductive material.

15       11. The optical interference display unit of claim 1, wherein a material for forming the first material layer is aluminum, chromium, cobalt, copper, silicon nitride or silicon oxide.

20       12. The optical interference display unit of claim 1, wherein a material for forming the second material layer is aluminum, chromium, cobalt, copper, silicon nitride or silicon oxide.

25       13. The optical interference display unit of claim 1, wherein a preferred material for forming the second material layer is a material with a higher etching selectivity ratio than that of a material for forming the first material layer.

25       14. A method for fabricating an optical interference display unit disposed on a transparent substrate, the method comprising:

forming a first electrode on the transparent substrate;

forming a sacrificial layer on the first electrode;

forming at least two openings in the sacrificial layer and the first electrode;

forming support structures in the openings;

5 forming a first material layer on the sacrificial layer and the support structures;

forming a second material layer on the first material layer;

forming a patterned photoresist layer on the second material layer;

while using the patterned photoresist layer as a mask, etching the second material layer to expose the first material layer;

10 stripping the patterned photoresist layer;

while using the second material layer as a mask, etching the first material layer to expose the support structures; and

removing the sacrificial layer.

15 15. The method for fabricating the optical interference display unit of claim 14, wherein the second electrode is a deformable electrode.

16. The method for fabricating the optical interference display unit of claim 14, wherein the second electrode is a movable electrode.

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17. The method for fabricating the optical interference display unit of claim 14, wherein the first material layer is made from a conductive material and the second material layer is made from a metal or a dielectric material.

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18. The method for fabricating the optical interference display unit of claim 17, wherein the first material layer is made from a metal or a dielectric material and the second material layer is made from a conductive material.

19. The method for fabricating the optical interference display unit of claim 14, wherein a material for forming the first material layer is aluminum, chromium, cobalt, copper, silicon nitride or silicon oxide.

5        20. The method for fabricating the optical interference display unit of claim 14, wherein a material for forming the second material layer is aluminum, chromium, cobalt, copper, silicon nitride or silicon oxide.

10       21. The method for fabricating the optical interference display unit of claim 14, wherein a preferred material for forming the second material layer is a material with a higher etching selectivity ratio than that of a material for forming the first material layer.